

Serial No. 10/723,271

Filed: November 26, 2003

Amendment and Response to Office Action

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### AMENDMENTS TO CLAIMS

1. (Currently amended) A water purification cartridge, comprising:
  - (a) a first porous layer having an inner surface and an outer surface;
  - (b) a porous purification block having an outer surface and an inner surface, and at least partially enclosed by the first porous layer;
  - (c) a cavity between the inner surface of the first porous layer and the outer surface of the porous purification block and in fluid communication with the porous purification block; and
  - (d) a powdered purification media comprising catalytic char disposed within the cavity, wherein the powdered purification media has a particle size distribution ranging from about 50 mesh to about 375 mesh.
2. (Original) The water purification cartridge of claim 1, wherein:

the first porous layer is sufficiently porous to allow water to flow from its outer surface through the porous layer to its inner surface, but not sufficiently porous to allow significant quantities of powdered purification media to pass from the inner surface, through the porous layer, to its outer surface.
- 3-8. Canceled.
9. (Currently amended) The water purification cartridge of claim 1 &, wherein the powdered purification media has a particle size distribution ranging from about 80 mesh to about 325 mesh.

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10. (Currently amended) The water purification cartridge of claim 1 &, wherein the powdered purification media has a particle size distribution ranging from about 50 mesh to about 200 mesh.
11. (Original) The water purification cartridge of claim 1, wherein the powdered purification media has a particle size distribution ranging from about 40  $\mu\text{m}$  to about 250  $\mu\text{m}$ .
12. (Original) The water purification cartridge of claim 1, wherein the porous filtration block comprises activated carbon disposed in a polymeric binder.
13. (Original) The water purification cartridge of claim 1, wherein the porous filtration block comprises a porous polymeric block.
14. (Original) The water purification cartridge of claim 13, wherein the porous polymeric block comprises a porous high density polyethylene block or a porous low density polyethylene block.
15. (Original) The water purification cartridge of claim 14, wherein the high density polyethylene block has a micron rating ranging between about 0.5 and about 10.
16. (Original) The water purification cartridge of claim 1, wherein the first porous layer comprises a porous high density polyethylene layer.
17. (Original) The water purification cartridge of claim 1, further comprising a second porous layer disposed adjacent to the inner surface of the porous filtration block, and in fluid communication with the porous filtration block.
18. Canceled.

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19. (Original) The water purification cartridge of claim 1, wherein the packed density of porous purification material ranges from about 0.2 g/cc to about 1.3 g/cc.

20. (Currently amended) A water purification cartridge, comprising:

(a) a first porous layer having an inner surface and an outer surface;

(b) a porous purification block having an outer surface and an inner surface, and at least partially enclosed by the first porous layer, wherein the porous polymeric block comprises a porous high density polyethylene block or a porous low density polyethylene block having a micron rating ranging between about 0.5 and about 10;

(c) a cavity between the inner surface of the first porous layer and the outer surface of the porous purification block and in fluid communication with the porous purification block; and

(d) a powdered purification media comprising catalytic char disposed within the cavity.

21. (Currently amended) A water purification cartridge, comprising:

(a) a first porous layer having an inner surface and an outer surface;

(b) a porous purification block having an outer surface and an inner surface, and at least partially enclosed by the first porous layer;

(c) a cavity between the inner surface of the first porous layer and the outer surface of the porous purification block and in fluid communication with the porous purification block; and

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(d) a powdered purification media comprising catalytic char disposed within the cavity, wherein the packed density of porous purification material ranges from about 0.2 g/cc to about 1.3 g/cc.